CLAIMS

What is claimed is:

1. A pharmaceutical preparation comprising a manufactured peptide having the formula pGlu-R^1-Pro, wherein R^1 is Leu, Tyr or Val, or pharmaceutically acceptable salts thereof, and a pharmaceutically acceptable carrier.

2. The peptide of claim 1 having the formula pGlu-Leu-Pro-NH_2.

3. The peptide of claim 1 having the formula pGlu-Tyr-Pro-NH_2.

4. The peptide of claim 1 having the formula pGlu-Val-Pro-NH_2.

5. A method of treatment of depression, schizophrenia or affective disorders in a mammal comprising the following steps:

a) providing a therapeutically effective amount of a composition comprising a peptide or pharmaceutically acceptable salt thereof of the formula pGlu-R^1-Pro, wherein R^1 is Leu, Tyr or Val;

b) administering the composition to the mammal.

6. The method of claim 5, wherein the composition further comprises a pharmaceutically acceptable carrier.

7. The method of claim 5, wherein administering comprises administering by a method of administration selected from the group consisting of oral administration and parenteral administration.

8. The method of claim 5 wherein the peptide is pGlu-Leu-Pro-NH_2.

9. The method of claim 5 wherein the peptide is pGlu-Tyr-Pro-NH_2.

10. The method of claim 5 wherein the peptide is pGlu-Val-Pro-NH_2.

11. A method for providing therapy for drug dependence in a mammal comprising the following steps:

a) providing a therapeutically effective amount of a composition comprising a peptide or pharmaceutically acceptable salt thereof of the formula pGlu-R^2-Pro, wherein R^2 is Glu, Phe, Leu, Tyr or Val;

b) administering the composition to the mammal.

12. The method of claim 11, wherein the composition further comprises a pharmaceutically acceptable carrier.

13. The method of claim 11, wherein administering comprises administering by a method of administration selected from the group consisting of oral administration and parenteral administration.

14. The method of claim 11 wherein the peptide is pGlu-Glu-Pro-NH_2.

15. The method of claim 11 wherein the peptide is pGlu-Phe-Pro-NH_2.

16. The method of claim 11 wherein the peptide is pGlu-Leu-Pro-NH_2.

17. The method of claim 11 wherein the peptide is pGlu-Tyr-Pro-NH_2.

18. The method of claim 11 wherein the peptide is pGlu-Val-Pro-NH_2.

19. A method for providing analgesia in a mammal comprising the following steps:

a) providing a therapeutically effective amount of a composition comprising a peptide or pharmaceutically acceptable salt thereof of the formula pGlu-R^2-Pro, wherein R^2 is Glu, Phe, Leu, Tyr or Val;

b) administering the composition to the mammal.

20. The method of claim 19, wherein the composition further comprises a pharmaceutically acceptable carrier.

21. The method of claim 19, wherein administering comprises administering by a method of administration selected from the group consisting of oral administration and parenteral administration.

22. The method of claim 19 wherein the peptide is pGlu-Glu-Pro-NH_2.

23. The method of claim 19 wherein the peptide is pGlu-Phe-Pro-NH_2.

24. The method of claim 19 wherein the peptide is pGlu-Leu-Pro-NH_2.

25. The method of claim 19 wherein the peptide is pGlu-Tyr-Pro-NH_2.

26. The method of claim 19 wherein the peptide is pGlu-Val-Pro-NH_2.

27. A method for inducing analeptic stimulation in a mammal comprising the following steps:

a) providing a therapeutically effective amount of a composition comprising a peptide or pharmaceutically acceptable salt thereof of the formula pGlu-R^3-Pro, wherein R^3 is Glu, Leu or Val;

b) administering the composition to the mammal.

28. The method of claim 27, wherein the composition further comprises a pharmaceutically acceptable carrier.

29. The method of claim 27, wherein administering comprises administering by a method of administration selected from the group consisting of oral administration and parenteral administration.

30. The method of claim 27 wherein the peptide is pGlu-Glu-Pro-NH_2.

31. The method of claim 27 wherein the peptide is pGlu-Leu-Pro-NH_2.

32. The method of claim 27 wherein the peptide is pGlu-Val-Pro-NH_2.